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Interview Agenda
App No. 10/733,866
February 4, 2011 at 10:00 a.m. PST (1 p.m. EST)

1) Please find below proposed amendments to Claim 1:

- 1. A method ~~of maintaining bandwidth capacity of a network~~ comprising:

  ~~defining~~ determining one or more future times ~~at~~ for which a bandwidth capacity of the network is evaluated;

  determining [[a]] total bandwidth ~~capacity~~ capacities of the network ~~(TNC)~~ at ~~each of the~~ respective future times;

  determining [[a]] total ~~demand~~ demands of users ~~(TUD)~~ for the network at ~~each of the~~ respective future times;

  determining, by a ~~processor, a~~ computing device, predicted ~~utilization (PU)~~ utilizations of the network at ~~each of the~~ respective future times as ~~a function~~ functions of the corresponding total ~~demand~~ demands of users ~~(TUD)~~ and the corresponding total bandwidth ~~capacity~~ capacities of the network ~~(TNC)~~;

  defining [[a]] maximum acceptable ~~utilization and a minimum acceptable utilization of the network at each of the~~ utilizations for the respective future times;

  comparing, by ~~a processor,~~ the computing device, respective predicted ~~utilization (PU)~~ utilizations of the network to ~~the~~ corresponding maximum ~~and minimum~~ acceptable ~~utilization~~ utilizations of the network ~~at each of~~ for the future times;

  ~~based upon said comparing, defining an adjusted predicted utilization (APU) at each of the future times, said defined APU being between the maximum and minimum acceptable utilization of the network;~~

  determining, for respective future times ~~each future time, a change~~ changes in total network bandwidth ~~capacity (DCNC)~~ capacities to be applied to the network in order to increase ~~or decrease~~ the total bandwidth capacity of the network based at least partly on said comparing of respective predicted utilizations of the network ~~to maintain the defined APU~~ corresponding maximum acceptable utilizations;

  determining ~~at each of the,~~ for respective future times, [[a]] lead ~~time~~ times for adding a ~~product for applying~~ one or more products for providing the determined ~~DCNC~~

to the ~~change in total~~ change in total network ~~bandwidth capacity~~ bandwidth capacity, wherein the lead ~~time indicates an~~ ~~amount~~ times indicate respective amounts of time needed for delivery and installation of ~~purchased DCNC~~ the one or more products; and

~~applying~~ initiating the determined ~~DCNC~~ changes in total network bandwidth capacity in advance of ~~each of the~~ respective future times based on ~~the~~ corresponding lead ~~time determined with respect to the future~~ times.

- Support for the above amendments can be found in the specification at least at:

  [0063] In the scenario that DETERMINED CHANGE IN NETWORK CAPACITY (DCNC) is positive (i.e., network capacity needs to be added to the network), method 100 may determine at 126 a LEAD TIME for DETERMINED CHANGE IN NETWORK CAPACITY (DCNC). In general, the LEAD TIME is a sum of an ADVANCE PURCHASE and an INSTALLATION and indicates an amount of time needed for delivery and installation of purchased DETERMINED CHANGE IN NETWORK CAPACITY (DCNC). For example, if the time to deliver purchased DETERMINED CHANGE IN NETWORK CAPACITY (DCNC) is one month (i.e., ADVANCE PURCHASE) and the time to install DETERMINED CHANGE IN NETWORK CAPACITY (DCNC) is another month (i.e., INSTALLATION), then LEAD TIME may be two months. According to this particular example and at 128, method 100 may initiate procurement of DETERMINED CHANGE IN NETWORK CAPACITY (DCNC) (e.g., by placing a purchase order) at least two months prior to the selected future time in order to have DETERMINED CHANGE IN NETWORK CAPACITY (DCNC) installed at the selected future time to accommodate user demand for the network. The method 100 then returns to 108 to select the next defined future time.

2) The subject matter in Claim 1, especially as amended, is neither anticipated nor made obvious by Tunnicliffe, Datta, or Vogl.
   - In particular, Vogl does not teach at least "determining for respective future times, lead times for adding one or more products for providing the determined change in total network bandwidth capacity"

3) In addition, please find below some proposed dependant claims to Claim 1 for your consideration:
   - 45. (**New**) The method of claim 1, further comprising determining the change in total network bandwidth capacity at least partly based on an amount of time the network is over utilized.

   - 46. (**New**) The method of claim 45, wherein the change in total network bandwidth capacity is substantially zero if the amount of time the network is over-utilized is below a first threshold.

   - 47. (**New**) The method of claim 46, wherein the first threshold is below 50%.

- Support for the above claims can be found at least in the following:

[0072] According to the preferred embodiment of the invention, method 200 may evaluate CURRENT UTILIZATION (CU) of the network based on percentiles of network usage. In one form, a percentile of network usage indicates a highest percent usage of the network capacity for a particular percentage of time. For example, a 75% network usage at 95th percentile indicates that for 95% of the time, users are utilizing less than 75% of the network capacity.

[0073] The method 200 may use percentile-based CURRENT UTILIZATION (CU) to determine DETERMINED CHANGE IN NETWORK CAPACITY (DCNC) at 202. If CURRENT UTILIZATION (CU) of the network across a range of percentiles substantially remains within a level between MINIMUM ACCEPTABLE UTILIZATION (MinAU) and MAXIMUM ACCEPTABLE UTILIZATION (MaxAU), then method 200 may determine that there is no DETERMINED CHANGE IN NETWORK CAPACITY (DCNC). This may be the case even if at a higher percentile (e.g., 99th percentile) or at a lower percentile (e.g., 30th percentile), CURRENT UTILIZATION (CU) rises above MAXIMUM ACCEPTABLE UTILIZATION (MaxAU) or falls below MINIMUM ACCEPTABLE UTILIZATION (MinAU), respectively. Such infrequent over-utilization or under-utilization of the network may not warrant an increase or decrease in the network capacity, since the network may accommodate user demand for a majority of time.